# Graywater Systems Help Recycle, Reduce Waste

Using graywater is an excellent way to recycle and conserve water, and can help you reduce potable water consumption. Your indoor water can be reused as graywater, providing a constant source of recycled water for irrigating landscape (excluding vegetable gardens).

## What is Graywater?

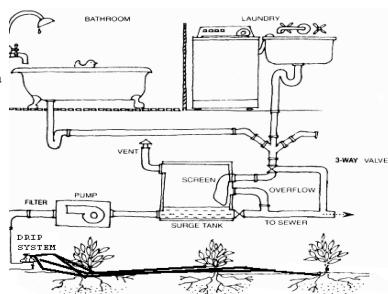
Graywater is untreated household wastewater which has not come into contact with toilet waste. It is used water from showers and baths, bathroom sinks and washing machines that can be directly reused for irrigation without undergoing a treatment process.

Graywater does not include water from toilets, kitchen sinks, dishwashers or laundry water from soiled diapers, due to potential health issues. Also, be aware that some soaps and detergents can contain chemicals that may be harmful to your plants when using graywater for irrigation.

# How do I put a Graywater system in my home?

The steps you need to take depend largely on what type of system you plan to install. Some systems do not require permits. Chapter 16A of the California Plumbing Code details system requirements, and plumbers and other professionals are available for the design and installation process if you feel you need help.

**No-Permit Systems**—Closed Clothes Washer Systems are graywater systems that utilize only a single domestic clothes washing machine in a one- or two-family dwelling, and do not need a permit. The City has expanded the no-permit requirement to systems used for landscape irrigation that discharge less than 250 gallons a day, and primarily consist of systems taking discharge water from washing machines and wash basins.



To qualify as "no-permit" system, these systems may *not* include a potable water connection or the use of a pump, or affect other plumbing, electrical, mechanical or building components, and must emphasize the use of Best Management Practices to prevent runoff.

**Permit Systems**—Permitting is still required for simple and complex systems that take discharge water from other elements in a residence—such as bathtubs and showers—that require more extensive in-house plumbing, electrical or mechanical modifications, or the use of a pump. However, in 2013, the City took important steps to streamline the permitting process for residents to install these graywater systems, streamlining the process for customers.

A graywater system can help you conserve and recycle. A standard home generates about 160 gallons of graywater per day, or nearly 60,000 gallons per year. A family of four could reuse 22,000 gallons a year by tapping the rinse water from its washing machine.

City of San Diego residents may contact the Development Services Department at (619) 446-5000 for further details and directions on permitting requirements.





Per the California Plumbing Code, a written construction permit must be obtained from the Enforcing Agency (in this case, the City of San Diego's Development Services Department), prior to the erection, construction, reconstruction, installation, relocation or alteration of any graywater system that requires a permit.

If you live in the City of San Diego, contact the City's Development Services Department at (619) 446-5000 for details and direction on permitting requirements.

### **Helpful Graywater Resources:**

#### City of San Diego Development Services Department - 619-446-5000

• http://www.sandiego.gov/development-services/pdf/industry/infobulletin/ib208.pdf

#### County of San Diego Department of Environmental Health - 858-565-5173

- http://www.sdcounty.ca.gov/deh/water/lu\_graywater\_systems.html
- http://www.sdcounty.ca.gov/deh/water/docs/lu\_graywater\_faqs\_revised.pdf

#### San Diego County Water Authority's "E-Guide To a WaterSmart Lifestyle"

• <a href="http://www.watersmartsd.org/content/eguide-water-smart-lifestyle">http://www.watersmartsd.org/content/eguide-water-smart-lifestyle</a>

#### California Urban Water Conservation Council

• http://www.h2ouse.org

#### San Diego Sustainable Living Institute

 $\bullet \ \, \underline{http://www.sdsustainable.org/services-and-programs/the-great-greywater-challenge/greywater-systems-installers/}$ 

#### California Department of Housing and Community Development, Emergency Rulemaking

• <a href="http://www.hcd.ca.gov/codes/shl/graywater">http://www.hcd.ca.gov/codes/shl/graywater</a> emergency.html